

(12) **United States Patent**
Ante et al.

(10) **Patent No.:** **US 10,599,560 B2**
(45) **Date of Patent:** **Mar. 24, 2020**

(54) **METHOD AND SYSTEM FOR IMPROVED PERFORMANCE OF A VIDEO GAME ENGINE**

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(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

(21) Appl. No.: **16/006,610**

(22) Filed: **Jun. 12, 2018**

(65) **Prior Publication Data**

US 2019/0377672 A1 Dec. 12, 2019

(51) **Int. Cl.**

G06F 17/30 (2006.01)

A63F 13/00 (2014.01)

G06F 12/02 (2006.01)

G06F 8/30 (2018.01)

A63F 13/77 (2014.01)

(52) **U.S. Cl.**

CPC **G06F 12/0223** (2013.01); **A63F 13/00** (2013.01); **A63F 13/77** (2014.09); **G06F 8/315** (2013.01); **A63F 2300/60** (2013.01); **A63F 2300/8082** (2013.01); **G06F 2212/15** (2013.01)

(58) **Field of Classification Search**

CPC **G06F 17/30**; **A63F 13/00**
See application file for complete search history.

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(57) **ABSTRACT**

Methods and apparatuses to improve the performance of a video game engine using an Entity Component System (ECS) are described herein. In accordance with an embodiment, the ECS creates and uses entities, to represent game objects, which are constructed entirely using value data types. The ECS constructs the entities within a memory in a densely packed linear way, and whereby the ECS constantly monitors (e.g., during game play) objects within a game and adjusts the entity distribution within the memory so that a maximum density of memory usage is maintained in real time as the game is being played.

20 Claims, 15 Drawing Sheets

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